

USS CONSTELLATION (CVA-64)

USS CONSTELLATION was commissioned in New York City October 27, 1961. Vice Admiral Robert B. Pirie delivered the principal address, and Mrs. Christian A. Herter, ship's sponsor, presented the officers and men with a traditional commissioning plaque.

The ship commenced her final sea trials January 16, 1962 and returned to New York January 18, having passed her acceptance trials with outstanding success. She was now fully ready for sea.

On September 3 the ship arrived at the Panama Canal Zone where she was the first large U.S. Navy ship to hold general visiting in 10 years. As a result, 52,000 people streamed aboard in a 3-day period, the largest mass of people Canal Zone police could remember ever being in the area.

The ship had its first change-of-command ceremony on November 19, 1962, two hours before departing on a 3-week Mid-Pac training cruise, when Captain S. W. Vejtasa relieved Captain T. J. Walker.

The ship's first permanent Air Group--Carrier Air Group 14--came aboard November 18, and after several training operations at sea in conjunction with the Air Group and other ships, CONSTELLATION departed on her first Western Pacific cruise February 21, 1963. She stopped at Pearl Harbor to undergo final training maneuvers, and at midnight on March 17 officially became a unit of the U.S. SEVENTH Fleet while enroute from Pearl Harbor to Subic Bay, Philippine Islands.

After a South China Sea operating period, the ship headed for the British Crown Colony of Hong Kong, arriving there on April 10. CONSTELLATION remained there for five days thus giving her crew an excellent opportunity to see the famous city. On April 15 the ship left Hong Kong and set its sights for Japan.

A special date in CONSTELLATION's history is July 25 when President and Madame Chiang Kai-Shek of the Republic of China came aboard for a one day visit. They arrived via helicopter while the ship was off Taiwan and were accompanied by VADM Thomas H. Moore, Commander U.S. SEVENTH Fleet.

August 28, the ship set a course for the United States, thus ending her first Western Pacific cruise. After an absence of over six months, CONSTELLATION returned to San Diego on September 10, 1963.

The ship experienced its second change-of-command when on November 9, 1963, Captain Frederic A. Bardshar relieved Captain Stanley W. Vejtasa as Commanding Officer of CONSTELLATION.

The Honorable Paul Nitze, Secretary of the Navy, visited the CONSTELLATION on December 17, 1963. The secretary's party included such high-ranking Naval officers as Admiral U.S.G. Sharp, Commander-in-Chief, Pacific Fleet; Vice Admiral P.D. Stroop, Commander Naval Air Force, Pacific Fleet and Vice Admiral E. P. Holmes, Commander U.S. FIRST Fleet.

During the first two months of 1964, CONSTELLATION conducted routine operations off the coast of Southern California, operating out of San Diego.

CONSTELLATION departed San Diego on March 2, 1964 on her second Middle Pacific cruise, arriving in Pearl Harbor on March 7. After training exercises in the Hawaiian Islands area, CONSTELLATION returned to San Diego on March 24.

May 3, world famous evangelist, Billy Graham spoke to nearly 3,000 Navymen and their families gathered on the flight deck of CONSTELLATION. Dr. Graham delivered the Sunday morning sermon aboard the carrier during his 1964 Southern California Crusade.

May 5, the ship departed San Diego on her second Western Pacific cruise. Enroute, CONSTELLATION stopped at Pearl Harbor for her second annual Operational Readiness Inspection.

The ship departed Hawaii on May 25 and officially became a unit of the U.S. SEVENTH Fleet on May 29 while enroute to the South China Sea.

CONSTELLATION arrived on station in the South China Sea off the coast of South Vietnam on 6 June.

Aircraft from Attack Carrier Air Wing FOURTEEN embarked aboard CONSTELLATION began low-level photo reconnaissance flights with armed escorts over the Plaine des Jarres in Laos on 6 June. The operation was undertaken to support United States commitments with the Royal Laotian Government. The flights were used to check Communist troop movement over the Plaine des Jarres.

CONSTELLATION remained on station 37 days until 13 July. CONSTELLATION then departed the South China Sea for Subic Bay, Philippines, arriving there on 15 July.

CONSTELLATION departed Subic Bay on 24 July and arrived at the British Crown Colony, Hong Kong on 27 July. The ship departed Hong Kong on the morning of 4 August. The ship was at sea only a few hours on 4 August when she began to launch aircraft for strikes on patrol boats then attacking American destroyers in the Tonkin Gulf. On 5 August air strikes were conducted on the patrol boat bases in Communist North Vietnam. This was a retaliatory move by the United States for unprovoked attacks by North Vietnamese patrol boats on two U.S. destroyers in international waters in the Gulf of Tonkin.

During the ship's second stay in the South China Sea, on 18 September her aircraft again went to the defense of a U.S. destroyer under attack by an unidentified vessel in heavy fog in international waters in the Gulf of Tonkin. Relieved on 21 September, CONSTELLATION departed for Subic Bay, Philippines, arriving that same night.

After the second visit to Subic Bay, the ship departed on 8 October and steamed for the port of Hong Kong. CONSTELLATION arrived in Hong Kong on 14 October after being delayed enroute by typhoon Dot. The ship departed Hong Kong after a six-day visit on 21 October and returned to Subic Bay on 23 October. After four days in Subic Bay, CONSTELLATION departed on 27 October and returned to duty in the South China Sea.

The ship remained on station 27 days until 23 November. CONSTELLATION returned to Hong Kong for a brief visit from 23-26 November.

On 27 November, the ship had its fourth change-of-command as Captain George H. Mahler III relieved Captain Frederic A. Bardshar as Commanding Officer of CONSTELLATION. On this date, crewmembers who took part in the Gulf of Tonkin operation were awarded the Navy Unit Commendation Ribbon and the Armed Forces Expeditionary Medal; "For exceptionally meritorious service in support of operations in the Gulf of Tonkin during the period 2-5 August 1964.

CONSTELLATION demonstrated the firm intent of the United States to maintain freedom of the seas and to take all necessary measures in defense of peace in Southeast Asia."

The ship returned to Yokosuka, Japan, for the last time on 15 January. After five days in port, the ship left Yokosuka for the United States on January 20. The ship arrived at San Diego, California, on 1 February 1965, after almost nine months in the Far East with the U.S. SEVENTH Fleet.

CONSTELLATION departed San Diego on 23 March 1965 for Bremerton, Washington, and an eight-month overhaul and yard period. While enroute the ship steamed its 200,000 mile since commissioning. After unloading ammunition in Bangor, Washington, CONSTELLATION steamed for Bremerton.

CONSTELLATION arrived in Bremerton on 31 March and began her yard period. She entered the world's largest dry dock, Dry Dock 6 in the Puget Sound Naval Shipyard, on 14 May.

Her overhaul completed, CONSTELLATION left Puget Sound Naval Shipyard on 29 November and sailed up Puget Sound to Bangor Naval Ammunition Depot. As a result of her \$19 million overhaul, the ship was newly outfitted with a number of computerized systems, including an Automatic Landing System, an Inertial Navigation System, an Integrated Operational Intelligence System, and a Naval Tactical Data System, making her the most modern warship afloat, as well as the largest warship.

After loading ammunition, CONSTELLATION departed Bangor on 3 December; she arrived in San Diego on 6 December to begin refresher and underway training to return her to her former level of fighting proficiency.

The ship's fifth change of command took place in San Diego on 29 January, 1966, when Captain William D. Houser relieved Captain George H. Mahler III as Commanding Officer.

Her underway training completed, CONSTELLATION left her home port of San Diego on 12 May 1966 and sailed to join the U.S. SEVENTH Fleet in the Western Pacific.

CONSTELLATION arrived in Hawaii on 17 May, completed her Operational Readiness Inspection, and departed for Yokosuka, Japan on 22 May. Arriving in Yokosuka on 1 June, CONSTELLATION became the flagship of Task Force 77 with Rear Admiral James R. Reedy embarked. On 7 June CONSTELLATION departed Yokosuka to begin operating in the South China Sea area.

CONSTELLATION and her embarked Air Wing, Carrier Air Wing FIFTEEN, arrived off the coast of Vietnam on June 15 to conduct combat operations against the Viet Cong and military targets in North Vietnam as a unit of the U.S. SEVENTH Fleet and flagship for Commander Attack Carrier Striking Force, U.S. SEVENTH Fleet.

During CONSTELLATION's tour of duty off Vietnam from 15 June to 9 November, the carrier sunk 22 North Vietnamese PT boats and damaged 13 others, destroyed 75 bridges, demolished 272 supply vehicles and damaged 337 others, destroyed 304 barges and damaged 513 others to help stem the flow of military supplies between Communist North Vietnam and the Viet Cong and North Vietnamese units in South Vietnam.

CONSTELLATION aircraft conducted daily air strikes against heavily defended North Vietnamese transportation and supply areas. Connie pilots flew major attacks against the Do Son, Dong Nham and Haiphong petroleum storage areas; the Uong Bi thermal power plant, and the Ninh Binh and Thanh Hoa transshipment and storage areas.

During CONSTELLATION's air strike operations "on the line" she was visited by the Honorable Paul Nitze, Secretary of the Navy; Admiral David L. McDonald, Chief of Naval Operations; the Honorable Chester Bowles, Ambassador to India, and entertainers John Gavin, Arthur Godfrey and Martha Raye.

On 9 November CONSTELLATION set sail for home, via Yokosuka, Japan, arriving in San Diego on 3 December.

On 9 December, Captain John C. Thomas relieved Captain William D. Houser as Commanding Officer.

USS CONSTELLATION: The Old and the New

By

CDR F. Gwyn, USNR-R

I

On Navy Day, 27 October 1961, the oldest and the newest commissioned ship in the United States Navy joined under a historic name. The first CONSTELLATION, built 1795-1798 in Baltimore, is the frigate that performed nearly 160 years of service before being decommissioned for the last time and returned to Baltimore in 1955. The attack aircraft carrier CONSTELLATION (CVA-64) completed in spite of a disastrous fire aboard, was built 1957-1961 at the New York (Brooklyn) Naval Shipyard, which celebrated its 160 years of service to the United States Fleet in 1961.

II

As an attack carrier, CONSTELLATION is, of course, a mobile base for about 100 planes of varied capabilities and missions. With over a thousand foot angled deck and four deck-edge elevators, the ship can handle the latest and most complex flight operations. Although CONSTELLATION is similar to the other members of her class, (FORRESTAL, SARATOGA, RANGER, INDEPENDENCE, and KITTY HAWK), her four steam catapults generate new maximum power for launching heavy planes, and her main propulsion plant, according to shipyard opinion, is "The most dependable and successful plant of any ship in its class."

The anti-aircraft system in CONSTELLATION is the first completely integrated Terrier Missile installation on a carrier, with four fire-control units and two dual launchers. The supersonic Terrier is a "Guided missile designed to intercept aircraft under all weather conditions at longer ranges and higher altitudes than conventional weapons." The CONSTELLATION's Terrier equipment will select and set up a missile in a few seconds, launch it, and then control its flight accurately.

The impressive size and power of the ship may be noted by contrasting demensions with the sailing frigate of a century and a half ago, the first of the half-dozen ships built for the new Navy of the new republic. With a flight deck of some four acres, the carrier could theoretically set some two dozen of the frigates on the take-off and landing areas, and with a standard displacement of about 79,000 tons, she could hold between three and four dozen copies of the older ship. Where the decks on CONSTELLATION I numbered four and the compartments twenty-odd, CONSTELLATION II has seventeen decks and the complement of officers and men on the carrier is about 12 times that of the frigate. The modern ship generates over 200,000 horsepower and will make speeds over 30 knots, where as the sailing ship, known as a fast clipper in her day, made 12½ knots maximum.

III

Although the history to date of any ship being commissioned must be brief, that of the second CONSTELLATION is unusual. Built under three commanders of the Brooklyn Yard -- Rear Admirals L.A. Kniskern, S.N. Pyne, and E.C. Holtzworth -- the carrier took a little over five years to complete, from its order in July 1956. In September 1957, Rear Admiral A.G. Mumma, Chief of the Navy's Bureau of Ships, marked the keel record plate, saw it welded in, and pronounced the traditional words, "The keel has been well and truly laid." With Lieutenant Merwin Sacrob of the Production Department as the first of six superintendents, CONSTELLATION was built in Drydock No. 5 in the next three years.



The launching took place in October 1960, when the ship was christened by Mrs. Christian A. Herter, wife of the Secretary of State.

On 19 December 1960, when the carrier was about 85% completed, fire broke out and burned for sixteen hours. Fifty shipyard workers lost their lives in what the Chief of the Bureau of Ships called, "The worst naval shipyard fire on record." Despite safety inspections, firefighting facilities, and outstanding performance by City and Yard personnel, the blaze, which started from an accidental puncture of a temporary fuel tank on the hanger deck, damaged most of the gallery deck and part of the hanger deck.

Returned to drydock, CONSTELLATION was cleared and repaired. The last plate on the flight deck was welded into place in June 1961, and in August, after the ship was refloated and berthed, a thousand officers and men of the crew moved aboard. With the yard once again meeting a deadline, CONSTELLATION II was commissioned on 27 October 1961.

#### IV

Although CONSTELLATION I is not as well known as her contemporary CONSTITUTION, she holds more titles than "Old Ironsides." For one thing, CONSTELLATION is the first ship of the United States Navy, having been launched over six months before the Navy Department itself came into being. For another, CONSTELLATION is entitled to be called, "except for Nelson's VICTORY, the oldest warship afloat." CONSTELLATION's capture of a French ship in 1799 was the first major naval victory of the new United States, and she is the only naval vessel remaining of those that took part in the Civil War, although her part was not distinguished. It is further interesting to note that when the two frigates made separate around-the-world voyages in the 1840's, CONSTELLATION logged 58,000 miles in 492 days at sea to CONSTITUTION's 52,279 miles in 495 days. All in all, CONSTELLATION was placed in commission, as frigate and as sloop-of-war, some 21 times, even seeing duty in World War II when CONSTITUTION had closed her sea days 60 years before.

Unlike the names of the country's first frigates -- CONSTITUTION, UNITED STATES, PRESIDENT, CONGRESS, and CHESAPEAKE -- that of CONSTELLATION needs some explanation in the twentieth century. It refers to a national symbol no longer visible but of central importance -- the circle of stars in the original American flag. "Resolved," stated the Continental Congress in 1777, "that the flag of the United States be 13 stripes alternate red and white; that the Union be 13 stars, white in a blue field, representing a new constellation." All the frigate names except CHESAPEAKE were suggested by a short-term Secretary of War but selected by President George Washington, who simply chose the first five names on the Secretary's list. Washington's selection probably gave rise to the rumor reported by Franklin D. Roosevelt when Secretary of the Navy, that CONSTELLATION's name was for the CONSTELLATION of stars in the flag, and as expressed by many, for the stars in Washington's crest. In the ship's original decoration, which was elaborate, the female figurehead of Nature had the sign of the Zodiac around her waist and "the constellation" on a sphere supporting her arm.

From the beginning, CONSTELLATION was an impressive ship. The launch was perfectly executed, according to her builder, her captain, and other observers. "Nothing (wrote one observer) could surpass the proud and stately movements of the ship -- she seemed conscious of the occasion, and passed on to the embrace of her destined element, with an air of dignity and grandeur inconceivable."

Once underway, CONSTELLATION's Chesapeake clipper lines helped make her a reputation for speed. "In fact, her speed, especially to windward, was so great that she was often referred to as the "Baltimore Race Horse." (Another tradition has it that the French called her the "Yankee Race Horse.") She was, furthermore, a tight and stable ship, "an excellent sailer, particularly in heavy weather." Perhaps the most moving tribute came from a young man, E.C. Wines, who cruised in CONSTELLATION 35 years after she was launched.

"She is among the oldest vessels in our Navy, and is one of those happy first productions never afterwards surpassed. In the beauty of her hull, she is unequalled by anything I have ever seen afloat. The easy swell and curvature of her sides, and the general harmony of the proportions are inimitable."

The record of the frigate includes service in five different wars, six combat engagements, and two significant diplomatic actions. Her first battle, in the undeclared war with France (1798-1801), was the most glorious. In February 1799, under Captain Thomas Truxtun, CONSTELLATION (38 guns) overtook the frigate INSURGENTE (40 guns) "reputed the fastest ship in the French Navy and the world," and in a battle in West Indies waters, defeated and captured her. There were only a half-dozen sailors killed/wounded in Truxtun's crew of about 300, compared to the Frenchman's 70 casualties in a crew of about 400. The speed and firepower of the new American frigate had combined with the seamanship and gunnery of the crew to make our first major naval victory as a federal nation.

"...I must declare (wrote Captain Truxtun) that it is impossible for officers and men in any service to behave better, than my people generally did on this occasion..." (One should also note, however, that during the chase, the INSURGENTE had lost her main topmast in a sudden squall.) Truxtun, his ship, and his crew became national idols, praised in celebrations, songs, and paintings, and the officers and men were awarded \$84,500 prize money for the INSURGENTE.

About a year later, Captain Truxtun and CONSTELLATION chased and engaged a large French frigate, the VENGEANCE, and won a long gun battle, though not capturing the vessel. With over 50 guns opposing his 38, and with crews equal at about 300, Truxtun's casualties were about 40 to the Frenchman's possible 100. According to an American visitor later, the French Capatin (who exaggerated elsewhere) "described in raptures the vivid fire from the CONSTELLATION as superior to anything he had ever seen; in his own words were "Superbe et Grande."

The Quasi-War with France did not last long, yet in it the frigate CONSTELLATION, under Truxtun, had won the two major engagements, established a reputation for speed and superior gunnery, and stablized the combat tradition of the new United States Navy.

The next step was taken in 1802, when CONSTELLATION fulfilled the function her class had actually been laid down for -- fighting the pirates of the Barbary states (Morocco, Algiers, Tunis and Tripoli). Beginning ignominiously as the ship ordered to deliver a tribute of jeweled guns for the Bay of Tunis, CONSTELLATION later, under Captain Alexander Murray, attacked Tripolitan gunboats and army units on shore during the American blockade. More colorfully, in 1815, CONSTELLATION was the first of four ships in Stephan Decatur's squadron that fought and took the MASHOUDA (46 guns) flagship of an Algerian corsair, and her crew of 400.

In the War of 1812, CONSTELLATION was ingloriously blockaded in Chesapeake Bay, yet, true to the Truxtun tradition, she "had her men well trained at the guns and at target practice..." as Theodore Roosevelt noted in his history of the war. This practice paid off in 1813 when the ship's crew of 150 manned a battery on an island and drove off a landing party of 700 British, killing or capturing about 90 of them. As Commodore Stephan Cassin said, "The officers of the CONSTELLATION fired their 18 pounders more like rifle-men than artillerists. I never saw such shooting."

After the battle with MASHOUDA in Algiers in 1815, the frigate went on to a number of cruises and patrols, protecting American interests in the Mediterranean, on both coasts of South America, in Florida, and finally in China. In 1842, under Commodore Lawrence Kearny, the old frigate transited the Indian Ocean to Macao, Canton and Hong Kong, where Kearny's diplomacy won the United States new rights to commerce equal to those of the British. The Commodore continued his diplomatic career in Hawaii on the return voyage when, arriving opportunely, he skillfully prevented King Kamehameha III from turning over the islands to the British.

For most of the Civil War, CONSTELLATION was on Mediterranean patrol against Confederate shipping. Late in the war, she received orders to Admiral Farragut's Gulf blockade, but they were cancelled on her arrival at New Orleans because of expiring enlistments. From 1865 to 1926, the famous frigate was in and out of commission, being used as a receiving or training ship in the Navy Yards at Norfolk, Philadelphia, and Newport, and making a dozen cruises with Naval Academy Midshipmen in the 1870's - 1890's. Her special duties in this last period included acting as a supply ship to the Mediterranean station and to Ireland during a famine, and transporting exhibitions over the Atlantic for the Paris and Columbian expositions. In 1914 and 1926, the old CONSTELLATION participated in patriotic celebrations in Baltimore and Philadelphia.

CONSTELLATION's last commissioned duty was during the ship shortage in World War II, when President Franklin D. Roosevelt, a naval antiquarian who had written an architectural sketch of the ship in 1918, revived her as flagship of the Atlantic Fleet, still afloat if not underway. For a decade after the war, the frigate rotted in Boston for lack of rehabilitation funds, until in 1955 a group of Baltimore devotees got her returned to her building port, where she is being restored as a civic and national monument. The CONSTELLATION Restoration Committee, which has spent \$180,000, needs another \$200,000 to complete the job.

One of the most appealing aspects of the old CONSTELLATION is the way in which she today maintains her identity despite frequent rebuilding over a century and a half. Built as a frigate of about 164 feet and 38 guns, she was rebuilt in 1854 into a sloop-of-war (or corvette) 14 feet longer and with 22 guns. Differences in dimension and design between the two versions have led some historians to assert that the old frigate was actually broken up and a new ship built about this time, a Smithsonian authority seeing the process as a Navy rush to get a new vessel without Congressional authorization. Historians and naval architects concerned with the Baltimore restoration, however, have presented evidence that "the ship today has essentially the same structure and shape of the 1797 frigate below the gun deck..." Quoting but not depending on Franklin D. Roosevelt's 1918 conclusion that "some 37 per cent of the CONSTELLATION remains...", the Baltimore group demonstrates that the original builder departed from the well known plans for the first class of frigates, following his own design, which corresponds to the structure of the present ships. Furthermore, the shipyard now restoring CONSTELLATION came across a copper bolt stamped 1777 in one of the frames, and the date of 1832 inside the mizzen topmast.

When Josephus Daniels, Secretary of the Navy in 1918, received Roosevelt's memorandum about CONSTELLATION, he wrote back: "Now that you have made your point and made everyone in construction mad at you, do you want the ship on the Hudson for a Christmas present?" Four decades later, one hopes that the point of CONSTELLATION's identity is settled, that it upsets no one, and that the old frigate is back in home port forever.



INTEGRATED OPERATIONAL INTELLIGENCE SYSTEM

In an era where speed and extreme accuracy are vital to military intelligence operations, the procedure of going to a file drawer and thumbing through a wide variety of publications to obtain the desired information - typing extracts from it and presenting these to a user activity is as outmoded as the smoothbore cannon.

The Integrated Operational Intelligence System (IOIS) was developed to meet the need for speed, flexibility, accuracy and above all, rapid retrieval of stored intelligence data.

The complete system is comprised of the RA-5C Reconnaissance-attack Weapons System and an Integrated Operational Intelligence Center (IOIC), installed aboard an aircraft carrier for mobility, or at a shore base. This integrated intelligence system is designed to provide a tactical commander with a full background of information on a target area. An exclusive feature of the IOIS is the speed with which newly gathered data can be returned to the intelligence center, processed, and presented for the commander's utilization.

Another important feature of the system is the capability of gathering reconnaissance data day or night and in all kinds of weather. Frame or panoramic cameras, side looking radar and passive electronics countermeasure equipment provide a wide range of collection capabilities. The system can employ various combinations of sensors as dictated by major requirements.

The Integrated Operational Intelligence Center will also handle intelligence data collected by other reconnaissance aircraft and is used to store, retrieve and utilize information received from other agencies having intelligence functions.

This reconnaissance system is matched to an aircraft whose performance enables it to conduct long-range carrier or land-based operations involving high altitude supersonic or low altitude high speed penetrations.

NAVAL TACTICAL DATA SYSTEM (NTDS)

Of all the new equipment on CONSTELLATION, the most modern and complete is the Naval Tactical Data System, a data processing and communications system that evaluates enemy threats and recommends counter-moves to shipboard commanders in millionths of a second. This multi-unit computer system enables Navy ships to exchange information at fantastic speeds. With its aid, an entire Naval Task Force can be coordinated almost to the point of operating as one ship. According to the office of the Chief of Naval Operations, under whose overall guidance the system was developed, NTDS will expand the effective scope of instant command decision function to ocean-wide dimensions.

NTDS was evolved to meet the demands of modern warfare, in which aircraft and missiles may approach a task force at speeds of thousands of miles an hour. It anticipates simultaneous attacks on fleet units from several quarters at several altitudes, in numbers that would saturate the plots with grease pencil transparencies now in use in Combat Information Centers. The system works at fantastic speeds. Uncorrelated information coming from a variety of sources goes into data processing equipment located on board. Here, such functions as detection, location, tracking, speed, identity and size of friendly and enemy contacts are worked out in transistorized computers that form the "brain" of the system. The "answers" are displayed automatically on scopes installed in the Combat Information Center where command and operating personnel monitor the tactical situation and issue the required commands. The display of such information makes it readily possible for key personnel to comprehend quickly the immediate situation, thus permitting a concentration of judgement for effective weapon assignment to threats against the ship. More than this, computer installations within the task force, interconnected by means of radio equipment employing advanced communications techniques, will exchange tactical information at high speeds. As a result, the task force commander, as well as individual unit commanders, will be provided with a complete overall tactical picture of the task force situation as well as the picture available for local information sources. The system can incorporate all anti-war weapons now in use or under development by the Navy.

AIRCRAFT FLOWN FROM USS CONSTELLATION

A4C SKYHAWK

The Douglas Aircraft SKYHAWK is the smallest carrier-based jet operational in the Navy. Its single Curtis Wright J-65 turbo-jet engine can develop over 7,000 pounds of thrust with speeds in excess of 500 mph. The attack aircraft is armed with two 20 MM cannons and is capable of carrying multiple bombs, rockets, nuclear weapons and guided missiles. It has a wing span of 27 feet with a 40-foot fuselage and can be used as a buddy tanker for in-flight refueling of other aircraft.

F4B PHANTOM

The world's fastest jet fighter, the McDonnell Aircraft F4B PHANTOM II can travel at better than twice the speed of sound. It is also the highest-flying and longest-ranging U. S. Navy fighter. It has registered altitudes above 100,000 feet. Its mission is interception and destruction of enemy aircraft, and it can be armed with Sidewinder or Sparrow III air-to-air missiles for that purpose. It is also capable of attack and tanker operations. Powered by two General Electric J-79 afterburning engines, each developing more than 16,000 pounds of thrust, it can fly on one engine if the need arises. The Phantom's two-man crew consists of a pilot and a radar intercept officer. It is equipped with detection and tracking systems which make it capable of destroying supersonic as well as subsonic enemy aircraft by day or night and in any weather.

E2A HAWKEYE

The Grumman Aircraft HAWKEYE is a twin turbo-prop powered aircraft which is used as an Early Warning type aircraft against hostile aircraft approaching land bases or task force groups. It is powered by two Allison T56-A-8 turbo-prop engines. The most distinguishing feature of the aircraft is a 24-foot rotodome which rotates, and houses radar and IFF antennas, and is automatically retracted when the wings of the plane are folded. Overall wing span is 81 feet, total basic weight of the aircraft is 36,000 pounds. The plane has a five-man crew.

RA5C VIGILANTE

The North American Aviation VIGILANTE is a twin-engine reconnaissance/attack aircraft designed for carrier-based or land based operation. It is capable of all-weather, high or low altitude, tactical reconnaissance and delivery of special and conventional weapons. Its primary mission is tactical reconnaissance. The aircraft and its systems comprise one-half of the U. S. Navy Integrated Operational Intelligence System (IOIS), and its counterpart is the ship or ground based Integrated Operational Intelligence Center (IOIC). Its overall weight is 39,000 pounds with a wing span of 53 feet, a length of 76 feet and a height of 16 feet. It has a two man crew.

-more-

#### A6A INTRUDER

The Grumman Aircraft INTRUDER is a two-man, sub-sonic, all weather attack aircraft. It is equipped with an integrated attack-navigation system, which, when coupled with its 7½ ton payload capacity, enables it to deliver a wide assortment of weapons. It is powered by two Pratt-Whitney J52-P-6 axial flow-turbo jet engines, which develop approximately 8,000 pounds of thrust each. Overall dimensions are: wing span 53 feet, height 16 feet.

#### A3B SKYWARRIOR

The Douglas Aircraft SKYWARRIOR is the Navy's largest carrier-based aircraft. It is a three-man, twin-engine jet bomber capable of high-altitude or low level bombing, mine-laying, and photo reconnaissance. It can carry the largest conventional bombs as well as nuclear weapons. It is 74 feet long with a wing span of 72 feet. The aircraft, fully loaded, weighs about 70,000 pounds, yet its two Pratt-Whitney J-57 turbo-jet engines can develop a total of 22,000 horsepower and produce speeds in excess of 500 mph.

#### CIA TRADER

The Grumman TRADER is a two-engine plane whose primary mission is the transport of supplies and personnel. In addition to a pilot and co-pilot, the TRADER can also carry nine passengers or 3,500 pounds of cargo. The plane is 42 feet long, has a wing span of 64 feet, and its reciprocating engines can produce cruising speeds of about 200 mph.

#### UH-2A SEASPRITE

The Kaman Aircraft SEASPRITE is the first turbine-powered utility helicopter to be used by the Navy and is used for plane guard, search and rescue, personnel and mail transfer, radar calibration and the transporting of cargo. It has a top speed of 167 mph and a hovering ceiling of 14,500 feet. It is the first Navy utility helicopter with retractable main landing gear and has a flotation hull for emergency landing on water.

-USN-

Captain Charles H. Lindberg  
United States Navy  
USS CONSTELLATION (CVA-64)

Captain Lindberg assumed duty as Constellation's Executive Officer on June 7, 1966 in Yokosuka, Japan. He reported to Constellation as Navigator in January, 1966 after serving on the staff of Commander Naval Air Force, U.S. Pacific Fleet, at North Island, San Diego, from April 1965.

Captain Lindberg was born July 11, 1922 in Independence, Iowa. He is a graduate of Valparaiso University, Valparaiso, Indiana. He entered the Navy in October 1942 as a student in the V-1 and V-5 programs. In September 1943 he began pre-flight training as a Naval Aviation Cadet.

On June 15, 1945, Captain Lindberg was commissioned Ensign and designated a Naval Aviator. Following a short tour of duty at Naval Air Station, Ft. Lauderdale, he served with Bombing Squadron 18. These assignments were followed by tours of duty at Naval Air Station, Glenview, Ill., and with carrier attack squadrons 10A and 95 at Naval Air Auxiliary Station, Charlestown, Rhode Island.

Captain Lindberg served with Composite Squadron 33 from September 1950 to July 1954. For the next two years he served at Naval Air Testing Center, Patuxent River, Maryland, as a test pilot on projects. The Naval Post Graduate School, Monterey, was Captain Lindberg's next assignment, where he was a student in the General Line course.

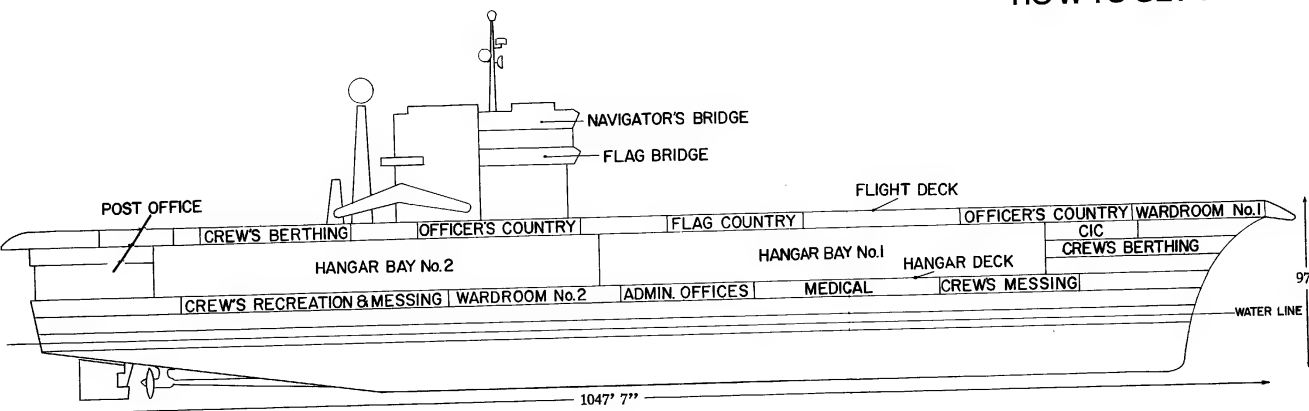
In June 1957 Captain Lindberg was assigned to Heavy Attack Squadron (VAH) 8 as an A-3D pilot. He served with the unit until April 1959 making tours of the Western Pacific on the USS Midway. Next, he served as Director of Training with VAH-123. In July 1961 he was assigned to Air Development Squadron 5 at China Lake, California, serving as Project Director and Executive Officer. Following refresher training on the A-3 with VAH-123 at Naval Air Station, Whidbey Island, Washington, in January and February 1964, he assumed command of VAH-8 aboard the USS Coral Sea.

Captain Lindberg is married to the former Norma Koschmann of Milwaukee. They and their five children, Susan, Charlotte, Carl, Mark and Sonja, make their home in Coronado, California. He is the son of Mrs. Effie R. Lindberg of Valparaiso, Indiana.



## HOW TO GET THERE

All spaces on **CONSTELLATION** have a four group number and letter designation to assist in locating them. The deck is indicated by one or two numbers preceding the first dash. Decks have decreasing numbers from the bottom of the ship (8-7-6, etc.) to hangar deck (1) where they are then preceded by an "0" and increase (01, 02, 03, etc.) to the highest level (011). The center group of numbers indicates the bulkheads (walls) and they have increasing numbers from bow to stern (1 to 245). There are about 4 feet between each bulkhead. The side of the ship in which the space is located is indicated by the last digit: even numbers to port; odd numbers to starboard. The letter indicates the use of the space.



FACTS OF INTEREST ABOUT THE USS CONSTELLATION (CVA-64)

1. COMPARATIVE SIZE

CONSTELLATION is the sixth and largest conventionally powered aircraft carrier to join the fleet. The first five in chronological order are: FORRESTAL, SARATOGA, RANGER, INDEPENDENCE, and KITTY HAWK.

CONSTELLATION is wide enough to sit both the SS UNITED STATES and the SS AMERICA side by side on her deck; or as wide as a World War I type destroyer was long.

2. STRUCTURAL

CONSTELLATION is 1,072 feet, 7 inches long, with a maximum extreme width at the flight deck of 273 feet, 5 inches, and a height from keel to flight deck of 97 feet. The full load displacement is approximately 84,000 tons. The propulsion plant will develop over 250,000 shaft horsepower, giving the ship a speed of more than 30 knots. Evaporator plants will produce approximately 300,000 gallons of fresh water a day, and the electric plant will handle a total electric load of almost 3 million watts.

The flight deck is approximately 4.1 acres in area. The two-acre area for parking and repairing aircraft is the main (hangar) deck. Four deck-edge elevators are installed for handling aircraft between the flight deck and hangar deck. Each has a lift capacity of 99,000 pounds. There are four steam catapults for launching aircraft, and 28 aircraft fueling stations distributed on the main and flight decks. The ship has two escalators, which travel at a speed of 90 feet per minute, to carry pilots dressed in flight gear from the ready rooms below deck to a flight deck position where they board their planes.

CONSTELLATION's length is such that if she were turned on end she would reach 20 feet from the top of the world's tallest tower -- Tokyo tower, 1,092 feet high.

Total number of compartments: 3,007

Crew spaces.....150	Machinery and Control.....57
Access trunks.....142	Storerooms.....154
Magazines.....120	Wiring.....16
Tanks and voids.....892	

Hospital and other related facilities:

Hospital, modern operating room.....	86 beds
Diet pantry.....	1
Sick Bay.....	2
Audiometric room.....	1
Bacteriological laboratory.....	1
Eye, ear, nose and throat treatment room.....	1
Pharmacy.....	1
Battle dressing stations.....	6
Decontamination stations.....	4
First-aid boxes.....	220
Dental office.....	4 chairs
Physiotherapy treatment room.....	1

The vessel has two hospital wards to accomodate 86 patients. It is provided with complete medical services and facilities for first-aid, outpatient, ambulatory and operation cases. The feeding, treatment and transfer of patients from one area to another are developed with the latest facilities for efficient operation.

Other services:

Telephones (Sound-powered, 123 circuits).....	876
(Dial).....	750
Electrical fixtures.....	24,750
Radio receivers.....	82
Radio tubes.....	30,000
Individual transmitters.....	37
Laundry.....	1
Barber shops.....	3 (14 chairs)
Shoe repair shop.....	1
Soda fountains.....	3
Ship's stores.....	5

3. MATERIALS, INSULATION, ETC:

Steel.....2,000,000 pounds	Furniture.....8,650 items
Cable.....2,244,000 ft. (425 mi.)	Piping.....185 miles

No wood in construction of hull and no planking on flight deck.

Fireproof, fire resistant and fire retardant material used throughout. This includes deck coverings and all fabrics used in furniture.

More than 917,600 square feet of fiber glass installed in hull for thermal and sound-proofing insulation. (80 carloads of material.)

Equipped with 305 inflatable life boats having a combined capacity for more than 4,575 men.

Sound insulation fitted around all noisy spaces such as fan rooms, motor generator rooms, control rooms, etc.

Thermal insulation fitted around all living and working areas.

4. PAINT:

Approximately 300,000 gallons of paint used; enough to paint 30,000 average homes. Various schemes of colors for habitability purposes are used.

5. ANCHORS, PROPELLERS AND RUDDERS:

Two anchors, weighing 30 tons each.

2,160 feet of anchor chain for 180 fathoms each (each link 360 pounds).

21 chocks and 24 bitts.

5,000 square yards of canvas.

Two rudders, each weighing 45 tons and equal in size to the floor of a two-bedroom house.

Four propellers (blades 21 feet in diameter).

6. INTERIOR COMMUNICATION:

About 85 circuits are installed, some of which require elaborate switch gear, and some of which are interconnected for damage control or battle conditions.

7. ELEVATORS AND ELECTRIC STAIRS:

CONSTELLATION is fitted with elevators ranging from 200 to 89,000 pounds capacity. In addition, there are two electric stairs which travel at 90 feet a minute to carry pilots to their aircraft from below decks.

8. STORAGE:

Stererooms in CONSTELLATION are equal to a six-story warehouse one block square and have a total capacity of 371,204 cubic feet. The vessel will carry from 10,000 to 12,000 different items in stock.

9. COMMISSARY:

Equipment and layout of the galleys, pantries, food service rooms, sculleries, butcher shops, mess rooms, vegetable preparation rooms, refrigeration commissary elevator, garbage grinders and trash burners have been arranged to provide quick and convenient service. The most modern kitchen devices are installed. Health, sanitation, rapid maintenance are stressed in all parts.

10. DAILY PREPARATION OF FOOD:

Meals served daily.....approx. 15,000  
Three special machines will automatically shape 2,400 hamburgers an hour.  
Crew's galley automatic coffee maker will prepare two gallons per minute.  
Automatic potato peelers will prepare 1,000 potatoes an hour.  
Nine units will dispose of 4,800 pounds of garbage an hour.

Bread.....1,308 loaves	Meat.....4,970 pounds
Vegetables.....10,150 pounds	Dry provisions...12,950 pounds
Daily products....1,080 pounds	Potatoes.....4,320 pounds

11. SHIP'S CAPACITY FOR CONSUMABLE GOODS:

Dry provisions.....2,148,600 pounds	Meat.....394,586 pounds
Vegetables.....487,000 pounds	Dairy products...51,000 pounds
Ice-making plant.....5,200 lbs/day	

12. ACCOMMODATIONS

Total area required for all living quarters.....88,550 sq. ft.  
Mess and lounge area.....55,964 sq. ft.

The ship will normally accommodate about 4,200 officers and men, but in wartime has berthing facilities for about 4,600. The crew has the latest habitability improvements for ships. Each man has an individual berth with a reading light and foam rubber mattress. Each berthing area has a recreation space with chairs and writing tables.

Approved For Release 2003/02/27 : CIA-RDP99B00048R000100100001-6  
USS CONSTELLATION (CVA-64)  
A FLOATING CITY

Air conditioning Plants	Machine Shop
Armory	Movie Theater
Bakery	Operating Rooms
Barber Shops (2) - 14 chairs	Oxygen Plants
Basketball Courts (2)	Paint Shop
Blacksmith shop	Pharmacy
Butcher Shop	Photographic Laboratories
Carpenter Shop	Post Office
Cobbler Shop	Printing Plant
Dental Office	Radio & TV Repair Shop
Distillation Plant (waterworks)	Sheet Metal Shop
Dry Cleaning Shop	Ship's Stores (5)
Electric Shop	Soda Fountains (3)
Electrical Generating Stations	Tailor Shop
Fire Stations	Volleyball Courts
Garbage Disposal	Weather Bureau
Hobby Shop	TV Studio (completely equipped) broadcasting 50 hrs. weekly while underway.
Hospital	100 TV Receivers
Ice Cream Plants (2)	Radio Studio (with 2 tape decks, 2-45 and 1-33 turntables)
Jail (brig)	Athletic Gearlockers (2)
Ladies Powder Rooms (4)	
Laundry	
Lounges	



Featuring the largest flight deck, the greatest weapons systems and operating the latest supersonic aircraft, CONSTELLATION and its accompanying striking force is the spearhead of modern sea and air power. She forms the vital core of the United States Navy's strength in the struggle to maintain peace in the world.

Her mission is "to support and operate aircraft, to engage in sustained operation against the enemy." To accomplish this, she can provide all the elements of airpower necessary for control of the seas and defense of our country: nuclear or precision conventional attack reconnaissance, air superiority, interdiction and close air technical support.

Mobility, flexibility and versatility are her trademarks. The ability to project United States military forces overseas --- unrestricted by foreign landlords or influence since she operates outside territorial waters --- is as important as her ability to move six or seven hundred miles daily across the vast ocean areas of the world.

Flexibility and versatility also play an important role in her life in that she is not limited to a single purpose as are intercontinental bombers. She can peacefully show the flag, perform armed reconnaissance, or launch deft attacks in large or small scale assaults with conventional or nuclear weapons. Her tentacles reach out and embrace the sea, its shores and most of the world's large land targets.

This huge carrier will provide a major contribution to deterring all-out war. It has the enemy over a barrel. If he decides to strike at this carrier and its forces, he will lose the vital element of surprise - or he can choose to ignore the carrier and be annihilated.

Regardless, our naval forces will be the forces-in-being after any exchange due to their dispersal, mobility and concealment capabilities. Carrier striking forces led by CONSTELLATION will be the residual power which will control the situation at the end of any war.

Representing the best possible investment in national security, CONSTELLATION facilities are capable of managing any future planned or unforeseen air-borne threat. She has the versatility to incorporate late developments and technological advances in weapons and/or systems, including and exploiting true mobility.